

AMENDMENTS TO THE CLAIMS

Claims 1-6 (Cancelled):

Claim 7 (Currently Amended):

~~The method as recited in claim 1, further comprising the method steps of A~~
2 method for matching output impedance of a driver to a load impedance,
 comprising:
4
 attaching an external impedance between an external contact and a first source
6 potential, wherein the load impedance comprises the external impedance plus
 impedance of interconnections between an output terminal of the driver and the
8 external impedance;
10 attaching an adjustable impedance between a second source potential and the
 output terminal of the driver;
12
 obtaining a reference potential, wherein the reference potential has a value half-
14 way between the first source potential and the second source potential;
16 obtaining a load matching impedance by changing the adjustable impedance until
 the absolute value of the difference between voltage of the output terminal of the
18 driver and the reference potential is less than a preselected value;
20 repeating the method obtaining the load matching impedance for a preselected
 number of conducting traces, wherein the conducting traces have different length
22 to width ratios;
24 based on the conducting trace length to width ratio of an additional driver,
 selecting the load matching impedance which provides the closest match of the
26 output impedance to the load impedance for the additional driver; and

28 transferring an instruction to the additional driver to set the load matching
impedance of the additional driver to the result of the method step of selecting the
load matching impedance.,

Claim 8 (Original):

2 The method as recited in claim 7, wherein the method step of obtaining the
adjustable impedance is performed via a compensation circuit, wherein the
compensation circuit is capable of performing the method step of obtaining the
4 adjustable impedance for the preselected conducting traces.

Claim 9 (Original):

9. 2 The method as recited in claim 7, wherein the adjustable impedance for at least
one of the drivers comprises a plurality of field effect transistors, wherein the
field effect transistors have capability of being individually turned on and turned
4 off.

Claim 10 (Currently Amended):

2 ~~The method as recited in claim 1, further comprising the method steps of~~
method for matching output impedance of a driver to a load impedance,
comprising:

4 attaching an external impedance between an external contact and a first source
6 potential, wherein the load impedance comprises the external impedance plus
impedance of interconnections between an output terminal of the driver and the
8 external impedance;

10 attaching an adjustable impedance between a second source potential and the
output terminal of the driver;

12 obtaining a reference potential, wherein the reference potential has a value half-
14 way between the first source potential and the second source potential;

16 obtaining a load matching impedance by changing the adjustable impedance until
18 the absolute value of the difference between voltage of the output terminal of the
20 driver and the reference potential is less than a preselected value;

22 based on the conducting trace length to width ratio of the driver and on the
24 conducting trace length to width ratio of an additional driver, computing the load
26 matching impedance which provides the closest match of the output impedance
to the load impedance for the additional driver; and

transferring an instruction to the additional driver to set the load matching
impedance of the additional driver to the result of the method step of computing
the load matching impedance.

Claim 11 (Original):

2 The method as recited in claim 10, wherein the method step of obtaining the
adjustable impedance is performed via a compensation circuit, wherein the
compensation circuit is capable of performing the method step of obtaining the
4 adjustable impedance for the preselected conducting traces.

Claim 12 (Original):

2 The method as recited in claim 10, wherein the adjustable impedance for at least
one of the drivers comprises a plurality of field effect transistors, wherein the
field effect transistors have capability of being individually turned on and turned
4 off.

Claims 13-17 (Cancelled):

Claim 18 (Currently Amended):

2 ~~The electronic circuit as recited in claim 13, further comprising~~ An electronic
circuit for matching output impedance of a driver to a load impedance,
comprising:

4 an external impedance attached between an external contact and a first source
6 potential, wherein the load impedance comprises the external impedance plus
 impedance of interconnections between an output terminal of the driver and the
 external impedance;

8 an adjustable impedance attached between a second source potential and the
10 output terminal of the driver;

12 a reference potential source, wherein the reference potential obtained from the
14 reference potential source has a value substantially half-way between the first
16 source potential and the second source potential and wherein a load matching
 impedance is obtainable by changing the adjustable impedance until the absolute
 value of the difference between voltage of the output terminal of the driver and
 the reference potential is less than a preselected value; and

18 a compensation circuit, wherein the compensation circuit comprises a comparator
20 having a first input, a second input, and an output, wherein the compensation
 circuit comprises a control circuit, wherein the first input of the comparator is
22 connected to the output terminal of the driver and the second input of the
 comparator is connected to the reference potential source, wherein the output of
24 the comparator is attached to an input of the control circuit, wherein, for a
 plurality of conducting traces having different length to width ratios, the control
26 circuit is capable of changing the adjustable impedance until the absolute value
 of the difference between the potential of the output terminal of the driver and the
28 reference potential is less than a preselected value, wherein the compensation
 circuit is connected to at least one additional driver, wherein the compensation
30 circuit is capable of selecting the adjustable impedance which provides the closest
 match of the output impedance of the additional driver to the load impedance for
32 the additional driver based on the conducting trace length to width ratio of the
 additional driver, and wherein the compensation circuit is capable of instructing
34 the additional driver to set the load matching impedance of the additional driver

to the value of the selected adjustable impedance.

Claim 19 (Currently Amended):

2 ~~The electronic circuit as recited in claim 13, further comprising~~ An electronic
 circuit for matching output impedance of a driver to a load impedance,
 comprising:
4
 an external impedance attached between an external contact and a first source
6 potential, wherein the load impedance comprises the external impedance plus
 impedance of interconnections between an output terminal of the driver and the
8 external impedance;
10 an adjustable impedance attached between a second source potential and the
 output terminal of the driver;
12
 a reference potential source, wherein the reference potential obtained from the
14 reference potential source has a value substantially half-way between the first
 source potential and the second source potential and wherein a load matching
16 impedance is obtainable by changing the adjustable impedance until the absolute
 value of the difference between voltage of the output terminal of the driver and
18 the reference potential is less than a preselected value; and
20 a compensation circuit, wherein the compensation circuit comprises a comparator
 having a first input, a second input, and an output, wherein the compensation
22 circuit comprises a control circuit, wherein the first input of the comparator is
 connected to the output terminal of the driver and the second input of the
24 comparator is connected to the reference potential source, wherein the output of
 the comparator is attached to an input of the control circuit, wherein, for a
26 conducting trace having a known length to width ratio, the control circuit is
 capable of changing the adjustable impedance until the absolute value of the
28 difference between the potential of the output terminal of the driver and the

reference potential is less than a preselected value, wherein the compensation
30 circuit is connected to at least one additional driver, wherein the compensation
circuit is capable of computing the adjustable impedance which provides a match
32 of the output impedance of the additional driver to the load impedance for the
additional driver based on the conducting trace length to width ratio of the
34 additional driver, and wherein the compensation circuit is capable of instructing
the additional driver to set the load matching impedance of the additional driver
36 to the value of the selected adjustable impedance.

Claim 20 (Cancelled):